

### **Grade 4 State Standards**

#### **Mathematics Standards**

# Content Standard 1: Students can understand and apply a variety of math concepts.

**Benchmark A:** Students can understand and apply number properties and operations.

**Grade Level Indicator:** Represent, compare, and order numbers **Grade Level Indicator:** Describe and apply properties of numbers

Grade Level Indicator: Classify numbers by divisibility

**Grade Level Indicator:** Demonstrate ways of performing operations

Grade Level Indicator: Use place value; write numbers in standard, expanded,

and exponential form

**Grade Level Indicator:** Use and interpret operational and relational symbols **Benchmark B:** Students can understand and apply concepts and procedures of algebra.

**Grade Level Indicator:** Solve equations and inequalities

Grade Level Indicator: Use variable expressions to model situations

Grade Level Indicator: Explore numerical patterns

Benchmark C: Students can understand and apply concepts of geometry.

**Grade Level Indicator:** Identify, classify, and compare geometric figures **Grade Level Indicator:** Describe geometric properties, patterns, and

relationships

**Grade Level Indicator:** Apply the concepts of perimeter, area, and volume **Benchmark D:** Students can understand and apply concepts of measurement.

**Grade Level Indicator:** Measure length/distance, time, temperature, weight, mass, and volume

**Grade Level Indicator:** Estimate measurements with appropriate precision **Grade Level Indicator**: Identify and use appropriate units of measurement

**Benchmark E:** Students can understand and apply concepts in probability and statistics.

**Grade Level Indicator:** Apply probability concepts and counting rules **Grade Level Indicator**: Understand and apply measures of central tendency and variability

### Content Standard 2: Students can understand and apply methods of estimation.

**Benchmark A:** Students can understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense.

Grade Level Indicator: Use standard rounding to estimate Grade Level Indicator: Use order of magnitude to estimate Grade Level Indicator: Use number sense to estimate

#### **Content Standard 3: Students can solve a variety of math problems.**

**Benchmark A:** Students can solve math problems

**Grade Level Indicator:** Solve single-step and multiple-step math problems **Grade Level Indicator:** Identify extraneous or insufficient information in problems

**Benchmark B:** Students can understand and apply problem-solving approaches and procedures.

**Grade Level Indicator**: Choose a method for solving a problem

## Content Standard 4: Students can interpret data presented in a variety of ways.

**Benchmark A:** Students can use tables and graphs to locate and read information.

Grade Level Indicator: Locate amounts in specific cells of a table

Benchmark B: Students can interpret data from a variety of sources.

**Grade Level Indicator:** Read amounts on scales of bar and line graphs **Grade Level Indicator:** Compare quantities to determine ranks, sums, or differences and to find ratios

**Grade Level Indicator**: Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

#### **Performance Standards for Mathematics**

**High Performance Level:** Understands math concepts, solves word problems, and often is able to use estimation methods. Can interpret data from graphs and tables.

**Distinguished:** Understands math concepts and is able to solve word problems. Can use estimation methods and interpret data from graphs and tables.

**Accomplished:** Usually can understand math concepts and solve word problems.

Often can use estimation methods and interpret data from graphs and tables.

**Intermediate Performance Level:** Usually can understand math concepts and solve word problems. Sometimes is able to use estimation methods and usually can interpret data from graphs and tables.

**Skilled:** Sometimes can understand math concepts and usually is able to solve word problems. Often can use estimation methods and interpret data from graphs and tables.

**Moderate:** Sometimes can understand math concepts and solve word problems. Sometimes is able to use estimation methods and interpret data from graphs and tables.

**Low Performance Level:** Sometimes can understand math concepts, but seldom is able to solve word problems. Rarely is able to use estimation methods or interpret data from graphs and tables.

**Marginal:** Sometimes can understand math concepts but seldom is able to solve word problems or use estimation methods. Sometimes can interpret data from graphs and tables.

**Weak:** Seldom can understand math concepts or solve word problems. Rarely can use estimation methods or interpret data from graphs and tables.

#### **Science Standards**

## Content Standard 1: Students can understand and apply skills used in scientific inquiry.

**Benchmark A:** Students can understand and apply the processes and skills of scientific inquiry.

**Grade Level Indicator:** Understand and apply the processes and skills of investigation

Benchmark B: Students can analyze and interpret scientific information.

Grade Level Indicator: Analyze and interpret information from scientific studies

### Content Standard 2: Students can understand concepts and relationships in life science.

**Benchmark A:** Students can understand structures of living things.

Grade Level Indicator: Understand the structures of living things

Benchmark B: Students can understand life cycles.

Grade Level Indicator: Describe and understand life cycles

**Benchmark C:** Students can understand environmental interaction and adaptation.

**Grade Level Indicator:** Identify and explain the roles of environmental interactions and adaptations

## Content Standard 3: Students can understand concepts and relationships in Earth/space sciences.

**Benchmark A:** Students can understand ideas about Earth's composition and structure.

**Grade Level Indicator:** Describe and understand Earth's composition and structure

**Benchmark B:** Students can understand changes in and around Earth.

Grade Level Indicator: Identify and explain changes in and around Earth

Benchmark C: Students can understand concepts relating to the universe.

Grade Level Indicator: Understand concepts and relationships of the universe

# Content Standard 4: Students can understand concepts and relationships in physical science.

**Benchmark A:** Students can understand and apply concepts related to mechanics, forces, and motion.

**Grade Level Indicator:** Describe and explain concepts related to mechanics, forces, and motion

**Benchmark B:** Students can understand and apply the concept of energy.

**Grade Level Indicator:** Understand the concept of energy and its various forms

**Benchmark C:** Students can understand and identify properties and changes of matter.

**Grade Level Indicator:** Identify and explain the properties and changes of matter

### **Literacy Standards**

# Content Standard 1: Students can comprehend what they read in a variety of literary and informational texts.

Benchmark A: Students can understand stated information they have read.

Grade Level Indicator: Understand stated information

**Benchmark B:** Students can determine the meaning of new words from their context.

Grade Level Indicator: Determine the meaning of new words from their context

**Benchmark C:** Students can draw conclusions, make inferences, and deduce meaning.

**Grade Level Indicator:** Draw conclusions, make inferences, and deduce meaning

**Benchmark D:** Students can infer traits, feelings, and motives of characters.

**Grade Level Indicator**: Infer traits, feelings, and motives of characters

**Benchmark E:** Students can interpret information in new contexts.

**Grade Level Indicator**: Interpret information in new contexts

Benchmark F: Students can interpret nonliteral language used in a text.

Grade Level Indicator: Interpret nonliteral language

Benchmark G: Students can determine the main idea of a text.

**Grade Level Indicator:** Determine the main idea of a text

**Benchmark H:** Students can identify the writer's views or purpose.

Grade Level Indicator: Identify the author's views or purpose

Benchmark I: Students can analyze style or structure.

Grade Level Indicator: Analyze the style or structure of a text

#### **Performance Standards for Literacy**

**High Performance Level:** Understands factual information and new words in context, is able to make inferences, can interpret either non-literal language or information in new contexts, and can determine a selection's main ideas and analyze its style and structure.

**Distinguished:** Understands factual information and new words in context. Can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

**Accomplished:** Usually understands factual information and new words in context. Usually can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

**Intermediate Performance Level:** Usually understands factual information and new words in context. Usually is able to make inferences and interpret either non-literal language or information in new contexts. Often can determine a selection's main ideas and analyze its style and structure.

**Skilled:** Usually understands factual information and new words in context. Often can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure. **Moderate:** Usually understands factual information and new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Usually can determine a selection's main ideas and analyze its style and structure.

**Low Performance Level:** Seldom understands factual information or new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Rarely can determine a selection's main ideas or analyze its style and structure.

**Marginal:** Seldom understands factual information or new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Sometimes can determine a selection's main ideas and analyze its style and structure.

**Weak:** Seldom understands factual information or new words in context. Rarely is able to make inferences or to interpret either non-literal language or information in new contexts. Seldom can determine a selection's main ideas or analyze aspects of its style and structure.